A/3671
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Docket No.: 30679/39713
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Algren et al.

Application No.: 10/772,811 Confirmation No.: 5957

Filed: February 5, 2004 Art Unit: 3671

For: Motorized Grain Scoop Examiner: Árpád Fábián Kovács

REPLY BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In response to the Examiner's Answer mailed October 12, 2006 in connection with the above-identified patent application, Applicant respectfully submits the instant Reply Brief in accordance with 37 C.F.R. §41.41.

REMARKS

The plain language of claims 9 and 16 makes clear that the paddle includes a bottom wall that is arcuate about an axis parallel to the shaft. Likewise, claim 1 clearly recites a bottom wall extending along an entire width of the paddle in a substantially planar manner between the first and second side wall. The Examiner's Answer attempts to significantly broaden the teachings of the Thorud reference to impermissibly encompass the claimed inventions.

Generally, Thorud discloses a snow blower characterized by a rotatable impeller including outwardly extending paddles having a complex curved shape. The Examiner alleges that Fig. 6 of Throud discloses claim 9 and 16, particularly:

> a paddle assembly having a shaft and a plurality of paddles disposed therefrom, each paddle having an arcuate bottom wall extending outwardly from the shaft, wherein the bottom wall is arcuate about an axis parallel to the shaft....

To support this allegation, the Examiner presents an annotated Fig. 6 purportedly showing the paddle's arcuate bottom wall and its axis parallel to the shaft. The Examiner argues that the "Appellant discovered a different (second) curvature than the one examiner considered." However, the Examiner's analysis is not merely 'different,' but rather, it is an incorrect and overly broad interpretation of Thorud that not only does not disclose the inventions of claims 9 and 16, but also impermissibly broadens the reference beyond the figures and description disclosed.

As clearly illustrated and described by Thorud, the impeller paddle is not "arcuate about an axis parallel to the shaft" as claimed. Rather, the paddle's "complex curved shape" curves "forwardly in the direction of rotation" about an axis that is perpendicular to the shaft. Abstract and Col. 5, line 33. Thourd discloses the impeller as having "a generally concave shape between each side thereof, i.e., it curves forwardly in the direction of rotation of impeller 30 from the midpoint to each side." Col. 5, lines 33-35. As more clearly illustrated in Thorud Fig. 5 and supported by the disclosure, the "complex curved shape" of the impeller does not include a "paddle having an arcuate bottom wall extending outwardly from the shaft, wherein the bottom wall is arcuate about an axis parallel to the shaft..." as claimed.

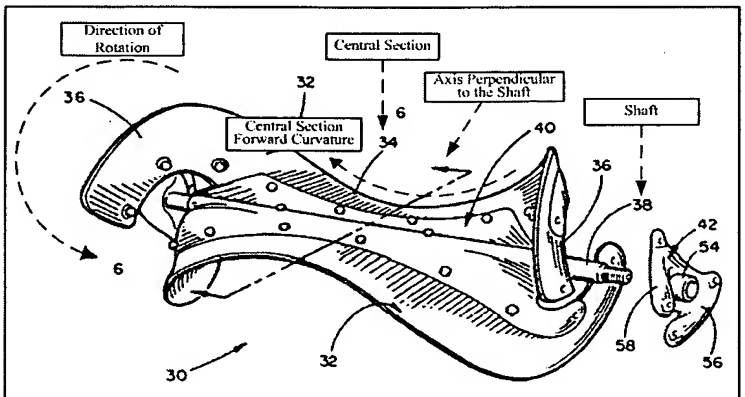

FIG. 5
(Annotated for Claim 9 and 16 Rejections)
U.S. Patent No. Re. 33,726
Thorud et. al, "Single Stage Snowthrower"

In the Answer, the Examiner interprets Thorud as disclosing claims 9 and 16 based on an annotated representation of Fig. 6, reproduced below. The Examiner advances a cross-

sectional view of the complex-curved impeller that was disclosed by Thorud to portray "one paddle in a new condition and one paddle in a relatively worn condition..." rather than a structure that is more analogous to the claimed bottom wall. Col. 3, lines 67-68. Further, the figure discloses a curved edge of the impeller paddle "end section" that cannot be an "arcuate bottom wall" as claimed. As can be seen in other illustrations of the impeller, i.e., Fig. 5 above, the curve the Examiner advanced as an "arcuate bottom wall" is merely the edge of the impeller paddle that, as previously discussed, is arcuate perpendicular to the shaft. As seen only in the cross-sectional representation of Fig. 6, the edge of the paddle impeller that curves in the direction of rotation cannot be the arcuate bottom wall that is arcuate about an axis parallel to the shaft as recited in claims 9 and 16.

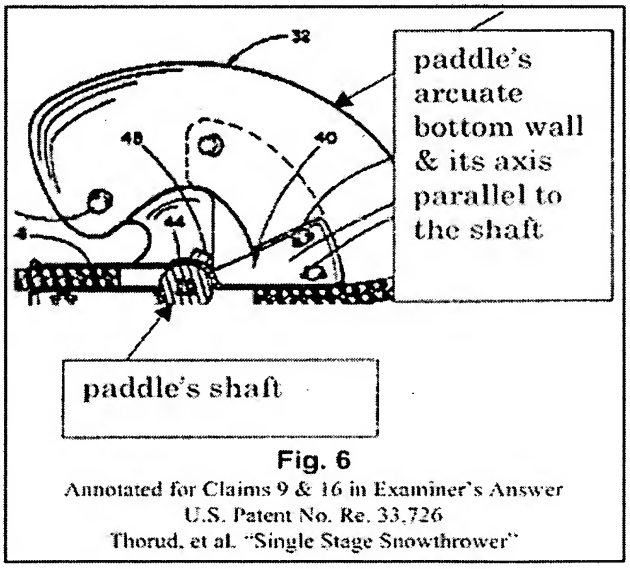

Fig. 6
Annotated for Claims 9 & 16 in Examiner's Answer
U.S. Patent No. Re. 33,726
Thorud, et al. "Single Stage Snowthrower"

Referring to dependent claims 2 and 17, the Examiner, again, advances Fig. 6 as disclosing the inventions recited in these claims. Particularly, the Examiner alleges, as in the allegations related to claims 9 and 16, that the curved edge of the impeller paddle created by the cross-sectional orientation of Fig. 6 discloses "the bottom wall of the paddles [that] is an arcuate bottom wall extending outwardly from the shaft first away from and then toward the direction of rotation of the paddles" as claimed. However, as previously discussed, the structure to which the Examiner refers is merely the curved edge of the impeller paddle and not a bottom wall as recited in claims 2 and 17.

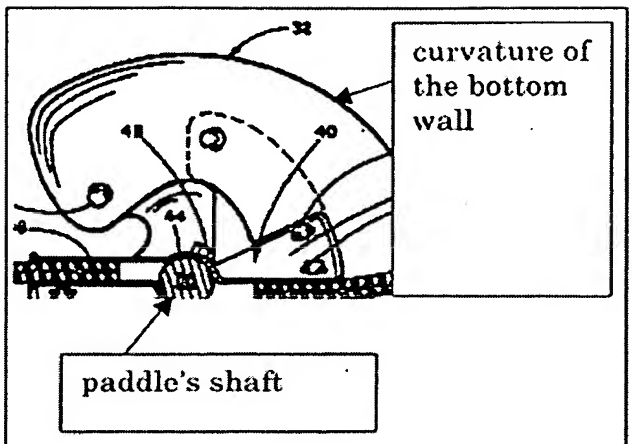

Fig. 6
Annotated for Claims 2 & 17 in Examiner's Answer
U.S. Patent No. Re. 33,726
Thorud, et al. "Single Stage Snowthrower"

In sum, any curvature that appears in Fig. 6 represents a paddle edge and does not include the "arcuate bottom wall... wherein the bottom wall is arcuate about an axis parallel to the shaft" as recited in claims 9 and 16 or that "the bottom wall of the paddles is an arcuate bottom wall extending outwardly from the shaft first away from and then toward the direction of rotation of the paddles" as recited in claims 2 and 17. Therefore, the Examiner has advanced an incorrect and overly broad interpretation of Thorud that, by any accurate understanding, does not disclose the inventions recited in claims 2, 9, 16, or 17.

Regarding claim 1, the Examiner advances an interpretation of Thorud Fig. 6 to allege that:

> the bottom wall extends along an entire width of the paddle in a substantially planar manner between the first side wall and the second side wall of the cavity and wherein each paddle includes a pair of side walls that in combination with the bottom wall define an open region....

Comparing the reference to claim 1, the Examiner states that in "the curvature taken [in Fig. 6], the bottom wall extends in a "substantially planar manner" which is [a] different curvature and interpretation than the one Appellant chose to consider." Examiner's Answer, p. 15. However, it is not clear to what "substantially planar" element of Fig. 6 the Examiner refers. If the Examiner refers to the paddle itself, it is abundantly clear that, as previously discussed, the disclosed impeller paddle is anything but "substantially planar" as the paddle has a conspicuous "complex curved" shape. However, if the Examiner refers to the "end sections"

(36) as seen most clearly in the cross-sectional view of Fig. 6, these structures extend generally in a plane perpendicular to the orientation of the shaft. If the Examiner advances this interpretation, it, again, falls far short of the recitations of claim 1 as the end sections never extend "between the first side wall and second side wall" as claimed.

In sum, Thoud does not disclose each and every limitation of the inventions recited in independent claims 1, 9, 16, dependent claims 2 and 17, and all other claims depending therefrom. For the foregoing reasons, it is respectfully submitted that a *prima facie* case of anticipation or obviousness of the claims on appeal has not been made, and all claims 1-23 are allowable. Appellant therefore requests that the rejection of the claims be reversed.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 13-2855, under Order No. 29757/P-576.

Dated: December 12, 2006

Respectfully submitted,

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